ABSTRACT OF THE INVENTION

An automated calibration system for tracking a colored object through a series of frames of data. The calibration system has a first processing device that executes a program, the program displaying at least one image frame from an image input device. An image selection device is utilized to select an object in one of the image frames. An image source device provides a hue-saturation-value (HSV) data array of pixels in the object. An HSV thresholding device thresholds the HSV data array of the pixels in the object. The system also has a second processing device that analyzes the HSV data array. The second processing device determines characteristics of the pixels in the at least one image frame that are to be associated with the object based on a probability.